

ABSTRACT

The present invention relates to a method of making a ringed nanogel with low levels of emulsifiers. The oil-in-water nanogel is thickened by an oil phase and a silicone component that self-structure to increase the complex viscosity of the composition and form the nanogel. The pre-emulsion, containing the silicone component, the oil phase and a water phase, is subjected to a high shear and high pressure treatment at least two consecutive times. The self-thickening of the gel occurs when the silicone component and the oil phase provide structure to the composition. Alternatively, the silicone component can be added to a pre-emulsion of the oil and water phases after the two phases are subjected to high shear and high pressure treatment. The combination of the silicone component with the treated intermediary emulsion is subjected to a second high shear and high pressure treatment which results in self-structuring of the silicone component and the oil phase. The resulting ringed nanogel has a difference in complex viscosity of at least about 10,000 poise under oscillation stress in the range of about 0 to 5,000 (dyne/cm²), and has an initial complex viscosity greater than about 15,000 poise.

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